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ABSTRACT

Graduates of the Mesa Public Schools Advanced Placement (A/P) program were surveyed to determine: (1) their attitudes toward their experience in the program; (2) college credits received for their A/P classes; and (3) their suggestions for A/P program improvement. A/P courses, offered within the regular curriculum, have grown significantly since their introduction in 1977. One hundred and eighty-two of 579 former A/P students responded to a mailed questionnaire in January 1984. Over 80 percent of the respondents felt the A/P classes helped prepare them for college work, were a valuable experience, and were more interesting and challenging than other classes. Most felt more A/P classes should have been offered (especially computer science and computer classes), and they should have taken more. Sixty percent received no college credit for their A/P classes. Twenty-three percent received between four and ten hours of semester credit. Many students felt unprepared for the College Board A/P tests. Students expressed concern about the accuracy and availability of information about the A/P program. They also felt an A/P class should not be dropped for lack of students. The survey used is appended. (BS)

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# The Mesa Unified School District Advanced Placement Program - Perspectives of Former Students

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## DEPARTMENT OF RESEARCH & EVALUATION

MESA PUBLIC SCHOOLS

# The Mesa Unified School District Advanced Placement Program - Perspectives of Former Students

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## FOREWORD

The major function of the Mesa Public Schools Department of Research and Evaluation is to provide information to decision makers. This data should be timely, valid, reliable and of sufficient depth, yet concise enough to speak squarely to the issues at hand.

In line with the above function, this report by the Department of Research and Evaluation documents the results of a survey concerning attitudes of former Advanced Placement students toward the Mesa Public Schools Advanced Placement Program.

The major effort in the development of this report was the responsibility of the Department of Research and Evaluation under the direction of Dr. James DeGracie answering directly to the Deputy Superintendent. The authors would like to thank Mr. David Eagleburger, Ms. Eleanor TeSelle, and secondary schools head counselors and principals for their assistance in the design and administration of the survey instrument. Special thanks must go to Sarah Peterson for her contributions to this study. In addition, Ms. Judy Hill and Ms. Gloria Dennis made significant contributions in typing and reproducing this report.

Dr. James K. Zaharis
Deputy Superintendent
Mesa Public Schools

## INTRODUCTION

The Advanced Placement Program is a national cooperative educational program of the College Entrance Examination Board. It is based on the premise that many young people can complete college-level studies in their secondary schools. Participating colleges grant credit and appropriate placement to students who meet their criteria on the examinations.

Course descriptions have been designed by a development committee consisting of secondary school and college teachers appointed by the College Board. These course descriptions are reviewed annually and published every spring. Although these descriptions are designed primarily for teachers, department heads and curricula coordinators, they can also serve as useful guides for students who wish to prepare for the examination through independent study.

In the 1977-78 school year, Mountain View initiated Mesa's program by establishing Advanced Placement courses in English and American history. The following school year (1978-79), Mesa High and Westwood enrolled in the program; Dobson enrolled when it opened in 1980-81.

In the last six years, the Advanced Placement Program at the comprehensive high schools has grown significantly. It should be noted, however, that the program is not an add on to the high school but a list of course offerings within the regular curriculum. These

courses are subject to the same constraints as other courses; i.e., if there is no student interest, the courses will not be offered. The courses are taken both by students who wish to take advantage of obtaining college credit and those who feel the courses better prepare them for college.

## METHODS

A list of A/P classes offered in the district's high schools since the program's inception was given to the district Data Processing Department. From that, a list of all students from 1978-79 on, who had participated in the A/P Program was generated. These former students were sent a questionnaire that was developed by putting together questions suggested by the director of the Extended Learning Program, members of the Superintendency, and the questionnaire used in Patricia Lund Casserly's study, "What College Students Say About Advanced Placement."

One hundred and eighty-two of 579 former A/P students responded to a survey administered in January of 1984. The survey was an attempt to determine the attitudes of those former students toward their experience in the Mesa Schools A/P Program, to determine if they had received credit for their A/P classes in college, and to elicit suggestions for improving the A/P Program. Of the 182 respondents, 41% were male and 59% were female. The highest percentage of respondents (59%) were from the two most recent graduating classes of 1982 and 1983. The fewest respondents were from the 1979 class (6% of the total).

## RESULTS

Students were asked to react to the quality of the A/P classes offered during their high school career. Over 80% of the students felt that the A/P classes helped prepare them for college work, were a valuable experience, were more interesting than other classes, and were more challenging than other classes. The students were split as to whether or not the classes should be more difficult. Seventy-eight percent of them strongly disagreed or disagreed with the statement that they were overworked in A/P classes. The former students also felt that the extra work of the A/P classes did not prevent them from participating in extra-curricular activities. A large percentage of students (72%) felt more A/P classes should have been offered, and 71% of the students felt they should have taken more A/P classes.

The largest percentage of students were most influenced in their decision about whether or not to take an A/P class by a teacher (30%), with 23% of them being influenced most by a friend, and an additional 23% by an A/P teacher. They were enrolled primarily in A/P classes because they felt it would provide them with the best preparation for college (57%) with another significant percentage of students (19%) feeling it would provide a challenge to them. When they considered which college to enter, the decision was not influenced by whether or not the college would accept A/P credit. In fact, most of them (60%) did not receive any college credit at all for the A/P classes they took in high school. However, 23% of them did receive between four and ten hours of

semester credit for the A/P classes that they did take. Only one student who responded to the survey was admitted to college with immediate standing as a sophomore.

A/P teachers were apparently the most helpful group to students interested in taking A/P classes and receiving advanced college placement. Eighty-five percent of the respondents rated the A/P teachers as very helpful or helpful in providing some information on A/P courses in advanced college placement, with only 37% rating regular classroom teachers helpful or very helpful, and only 30% of them rating counselors helpful or very helpful. Students, however, expressed concern about the lack of information concerning A/P courses and their applicability to college.

Students were asked a number of questions about the individual classes that they took. There were seven different categories of classes incuding junior English, senior English, math, biology, chemistry, physics, and history. Only one student of the 182 respondents took the A/P test without taking the A/P class and that was one student who took the senior English A/P test.

The 182 respondents took 306 different A/P classes. Of the 306 different classes, the students took the A/P test and the A/P course in 142 cases (46%) compared to 164 cases in which they took only the A/P course without taking the test. On the question that asked students if they received college credit for the class, 182 respondents indicated they took 304 classes, they received college credit for 85 (28%) of those classes, and did not receive credit for 219. When asked whether or not they took the same class again in college, the students indicated they were enrolled in 302 classes

with 127 (42%) indicating they did not have to take the same class again in college and 175 (58%) indicating that they did have to take the same class again. Note: There were differences in the total number of classes taken in the three previous questions because not all students answered every question about all courses.

Seventy-four percent of the students indicated that the A/P classes helped them do better in college class work in the same class and 88% of them indicated that the A/P classes helped them do better in related college classes. Fifty-seven percent of the students felt that they were prepared for the Advanced Placement test by the class with 43% indicating they were not prepared for the test. Overall, the students felt positive about their A/P experience with 85% of the students rating the experience as outstanding or very good. Eighty-nine percent of the students rated their teachers as very good to excellent. Finally, 23% of the students indicated that the A/P classes they took in high school were more difficult or much more difficult than classes they took in college with 77% indicating it was the same or more difficult.

When asked about other possible A/P courses, over 80% of the respondents thought computers, calculus, chemistry, physics, and computer science classes should be added to the A/P Program at their school. In addition, a significant percentage of students thought that biology (79%), foreign language (71%), music (53%), and art (48%) should be added at their school.

## CONCLUSIONS

The vast majority of students felt very positive about their A/P experience. They thought their teachers were of excellent to very good quality, that their classes helped them do better in college course work in both related and unrelated classes. When asked about specific classes, most students felt that the classes provided the challenge they needed and the information necessary to do well in college. There was some concern about whether or not they were prepared to take the A/P tests. Forty-three percent of the students indicated they were not prepared for the test. A large percentage of the students that responded to the survey indicated that some additional A/P classes should be offered. The courses that seem to have the largest number of students indicating that the courses should be in place at their schools were computer science and computer classes. Consideration should be given to adding those classes. Finally, a significant concern of the students appeared to be the information that was available about A/P classes. Students were concerned that not enough information was available from any one source and that the information that was available was not as accurate as it could possibly be. Consideration should be given to providing information to all teachers about the availability of A/P classes and making sure that all students are provided information on the A/P Program. Student comments expressed concern that some A/P classes are being dropped for lack of students in the class. Those respondents felt that even if very few students are available

for a particular A/F class, they should have the opportunitv to take the class as it provided such a wonderful opportunity for former students.

# INTRODUCTION

# PROGRAM

The Advanced Placement Program is a national cooperative educational program of the College Entrance Examination Board. It is based on the premise that many young people can complete college-level studies in their secondary schools. Participating colleges grant credit and appropriate placement to students who meet their criteria on the examinations.

Course descriptions have been designed by a development committee consisting of secondary school and college teachers appointed by the College Board. These course descriptions are reviewed annually and published every spring. Although these descriptions are designed primarily for teachers, department heads and curricula coordinators, they can also serve as useful guides for students who wish to prepare for the examination through independent study.

The Advanced Placement examinations are offered throughout the world each May. No examination is longer than three hours and some are shorter. They cost $38.00 each and are administered at participating schools or at multischool centers. All the

examinations contain either an essay or problem-solving section; most of them also contain a section consisting of objective questions.

In June the examinations are graded by several hundred college and secondary school teachers familiar with the program brought together especially for this purpose and serving under the direction of a Chief Reader in each field. Questions on the objective sections are scored by machine with a correction factor incorporated to compensate for ramdom guessing. Readers' judgments on the essay questions are combined with results of the objective questions, and total raw scores are converted by the Chief Readers to the program's five-point scale: 5--Extremely Well Qualified, 4--Well Qualified, 3--Qualified, 2--Possibly Qualified, 1--No Recommendation.

In early July the grades are reported to students, their secondary schools, and the colleges they are entering. Although the program provides a curricular guide and examination in each field, all colleges do not follow the same, or even similar, procedures upon receipt of Advanced Placement examination grades. Many colleges grant credit and placement automatically for qualifying work on the examinations; some grant either placement or credit only; others are still establishing their policies.

Colleges and universities differ in their acceptance of examination grades for advanced placement or credit. Students must refer to a list published by the Board in order to determine the acceptance level authorized at their chosen college. Most colleges accept 3's although there are also colleges which require 4's or

above for placement credit. A score of 2 is accepted at very few colleges. Examples of college and university criteria are:

Harvard and Radcliffe
American History 3C
English Composition and Literature 3Cq
Calculus AB 3Cq

Yale
American History 4P, 4C
English Composition and Literature 5P, 3Pq, 5C, 4Cq
Calculus BC 3P, 4C, 3Cq

Stanford
American History 4C
English Composition and Literature 4P, 4C
Calculus AB 4Pq, 4Cq

ASU
American History 4C, 3Cq
English Composition and Literature 4C, 3Cq
Calculus AB 3C

University of Arizona
American History 4C, BCq
English Composition and Literature 3Cq
Calculus AB 3C

P--Routine placement or exemption: The institution routinely offers some form of placement or exemption to virtually all students with the grade or score shown.

Pq--Placement or exemption with some possible qualifications: The institution normally offers some form of placement or exemption on the basis of the grade or score listed, but with some possible qualifications, such as departmental review, exception of students in certain programs, use of test results in conjunction with other predictors, etc.

C--Routine credit: The institution routinely offers credit to virtually all students with the grade or score shown.

Cq--Credit with some possible qualifications: The institution normally grants credit on the basis of the grade or score listed, with some possible qualifications, such as departmental review, exception of students in certain programs, use of test results in conjunction with other predictors, etc.

E--Essay required: The essay section of the examination (certain CLEP General and Subject Examinations only) must be taken in conjunction with the rest of the test. The essays are ungraded and so performance on this portion of an examination is evaluated only by the institution.

## HOW HAVE MESA STUDENTS PERFORMED?

In the 1977-78 school year, Mountain View initiated Mesa's program by establishing Advanced Placement courses in English and American History. The following school year (1978-79), Mesa High and Westwood enrolled in the program; Dobson enrolled when it opened in 1980-81.

In the last six years, the Advanced Placement Program at the comprehensive high schools has grown significantly. It should be noted, however, that the program is not an add on to the high school but a list of course offerings within the regular curriculum. These courses are subject to the same constraints as other courses; i.e., if there is no student interest, the courses will not be offered. The courses are taken both by students who wish to take advantage of obtaining college credit and those who feel the courses better prepare them for college.

Table 1 presents results of those students who chose to take the Advanced Placement tests by year, school, and curriculum area. The number of students receiving a score of 3 or higher (the score most colleges accept for credit) increased steadily up to 1980-81, decreased in 1981-82, and then increased again in 1982-83. A total of 82 students received a 3 or higher in 1982-83.

When the number of students receiving a 3 or higher is related to the number taking the test, a different pattern emerges over the years (Figure 1). The percentage of students passing the test

Table 1
Advanced Placement
Student Performance
1978-84

Mean High

| | | CHEMISTRY | | | | | BIOLOGY | ENGLISH* | | | | | | AMERICAN HISTORY | | | | CALCULUS AB | | | | TOTALS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 80-81 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 80-81 | 81-82 | 82-83 | 83-84 | 80-81 | 81-82 | 82-83 | 83-84 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 |
| Test Scores | 5 | — | 1 | 1 | — | 1 | — | — | 1 | 1 | 1 | — | 1 | — | — | 1 | — | — | — | 1 | — | — | 2 | 2 | 1 | 3 | 1 |
| | 4 | 1 | 1 | — | 2 | — | — | 1 | 1 | 4 | 2 | 3 | 2 | 1 | — | — | 1 | — | 1 | — | — | 2 | 2 | 5 | 5 | 3 | 3 |
| | 3 | — | 1 | — | 1 | — | — | 5 | 3 | 7 | 7 | 5 | 1 | 4 | 1 | — | 2 | — | — | — | 1 | 5 | 4 | 11 | 9 | 5 | 4 |
| | 2 | — | — | 1 | — | — | — | 4 | 10 | 11 | 5 | 2 | 1 | 6 | 1 | — | 2 | — | — | — | 1 | 4 | 10 | 18 | 6 | 2 | 4 |
| | 1 | — | — | — | — | — | 1 | 2 | 1 | 1 | 1 | — | — | 2 | — | — | — | 1 | 1 | 1 | — | 2 | 1 | 5 | 2 | 1 | 0 |
| Total Taking Test | | 1 | 3 | 2 | 3 | — | 1 | 12 | 16 | 24 | 16 | — | 5 | 13 | 2 | — | 5 | 1 | 2 | — | 2 | 13 | 19 | 41 | 23 | 14 | 12 |

*English Lang. & Comp. and/or English Comp. & Literature

Note: If data does not appear for a year, tests were not attempted by students.



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Mountain View

| | | ENGLISH* | | | | | | | AMERICAN HISTORY | | | | | | | CALCULUS** | | | | | COMPUTER SCIENCE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 83-84 |
| Test Scores | 5 | 1 | — | 1 | 1 | 4 | 7 | 6 | — | — | — | 3 | 1 | — | 2 | 2 | — | — | 2 | 2 | 2 |
| | 4 | 2 | 4 | 5 | 8 | 9 | 4 | 8 | 1 | 2 | — | 1 | 5 | 1 | 3 | 2 | — | — | 3 | 1 | — |
| | 3 | 10 | 7 | 15 | 17 | 11 | 8 | 14 | — | 3 | 4 | 1 | 2 | — | 1 | 4 | 5 | 5 | 2 | 4 | 1 |
| | 2 | 6 | 5 | 8 | 21 | 7 | 9 | 7 | — | 1 | 6 | 2 | — | — | 2 | 3 | 1 | 2 | 1 | 1 | — |
| | 1 | — | — | 1 | 1 | — | 1 | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — |
| Total Taking Test | | 19 | 16 | 30 | 48 | 31 | 29 | 35 | 1 | 6 | 10 | 7 | 8 | 3 | 8 | 11 | 6 | 8 | 8 | 8 | 3 |

| | | PHYSICS† | | | | | | BIOLOGY | | | | GERM. | SPANISH†† | | FRENCH | CHEM. | TOTALS | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 79-80 | 80-81 | 82-83 | 83-84 | 78-79 | 80-81 | 83-84 | 82-83 | 80-81 | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 |
| Test Scores | 5 | 1 | — | — | — | 1 | 1 | — | — | — | — | — | — | — | 1 | — | 1 | 1 | 3 | 4 | 5 | 11 | 13 |
| | 4 | 3 | 3 | — | 1 | 4 | 2 | — | — | — | 1 | — | — | — | — | 1 | 3 | 9 | 10 | 10 | 15 | 12 | 15 |
| | 3 | 4 | 5 | 7 | 3 | 1 | 3 | — | 5 | 3 | 3 | — | 2 | — | — | — | 10 | 14 | 28 | 37 | 21 | 14 | 26 |
| | 2 | 2 | 3 | 1 | 2 | 1 | — | 1 | 3 | 1 | 1 | 1 | — | 1 | — | 1 | 6 | 8 | 22 | 29 | 11 | 12 | 11 |
| | 1 | 7 | 2 | 4 | — | — | — | — | — | — | — | — | 1 | — | 5 | — | — | 7 | 3 | 6 | 1 | 6 | 0 |
| Total Taking Test | | 17 | 13 | 12 | 6 | 7 | 6 | 1 | 8 | 4 | 5 | 1 | 3 | 1 | 6 | 2 | 20 | 39 | 66 | 86 | 53 | 55 | 65 |

*English Lang. & Composition or English Comp. & Literature.
**Calculus - AB and/or BC
†Physics B, Physics C: Mechanics, and/or Physics C: Elec. & Mag.
††Spanish Language
Note: If data does not appear for a year, tests were not attempted by students.

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Westwood

| | | ENGLISH | | | | | | CALCULUS AP | | | | | PHYSICS B | | | | AM. HISTORY | | | | CHEMISTRY | TOTALS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 | 78-79 | 79-80 | 80-81 | 81-82 | 83-84 | 80-81 | 81-82 | 82-83 | 83-84 | 80-81 | 81-82 | 82-83 | 83-84 | 83-84 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 |
| Test Scores | 5 | — | 2 | — | — | — | 1 | 1 | — | — | — | — | — | — | — | — | — | — | 1 | — | — | 1 | 2 | — | — | 1 | 1 |
| | 4 | 1 | 1 | 3 | 3 | 1 | 3 | 1 | — | — | — | 1 | — | — | — | 1 | — | 1 | 1 | — | — | 2 | 1 | 3 | 4 | 2 | 5 |
| | 3 | 1 | 6 | 8 | [illegible] | 10 | 5 | 1 | 1 | [illegible] | 1 | 1 | 2 | — | [illegible] | — | — | 3 | — | 5 | — | 2 | 7 | 12 | 12 | 11 | 11 |
| | 2 | 2 | 2 | 3 | 8 | 3 | 4 | — | — | — | 1 | — | 1 | 1 | [illegible] | — | — | 1 | — | 7 | — | 2 | 2 | 4 | 11 | 3 | 11 |
| | 1 | — | — | — | 3 | — | 2 | — | — | 1 | — | 1 | 1 | 1 | — | — | — | — | — | 2 | 3 | — | — | 2 | 4 | — | 8 |
| Total Taking Test | | 4 | 11 | 14 | 22 | 14 | 15 | 3 | 1 | 3 | 2 | 3 | 4 | 2 | 1 | 1 | — | 5 | 2 | 14 | 3 | 7 | 12 | 21 | 31 | [illegible] | 36 |

*English Lang. & Comp. and/or English Comp. & Literature

Note: If data does not appear for any year, tests were not attempted by students.



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Dobson

| | | AM. HISTORY | | | ART: STUDIO GENERAL | CHEMISTRY | | COMPUTER SCIENCE | ENGLISH* | | CALCULUS AB | | PHYSICS B | TOTALS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 81-82 | 82-83 | 83-84 | 83-84 | 82-83 | 83-84 | 83-84 | 82-83 | 83-84 | 82-83 | 83-84 | 83-84 | 82-83 | 83-84 |
| Test Scores | 5 | 2 | — | 1 | — | — | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 9 |
| | 4 | 1 | 4 | 6 | 1 | — | 2 | — | 1 | 5 | 1 | 4 | 3 | 6 | 21 |
| | 3 | 2 | — | 4 | 1 | 1 | 2 | 4 | 8 | 5 | 3 | 1 | 3 | 12 | 20 |
| | 2 | 2 | — | 1 | 1 | — | 2 | — | 3 | 3 | — | 1 | — | 3 | 8 |
| | 1 | — | — | — | 2 | — | — | 2 | — | — | — | — | — | — | 4 |
| Total Taking Test | | 7 | 4 | 12 | 5 | — | 8 | 7 | — | 14 | — | 9 | 7 | 23 | 62 |

*English Comp. & Literature

Note: If data does not appear for a year, tests were not attempted by students.

All High Schools

| | | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 | 83-84 |
|---|---|---|---|---|---|---|---|---|
| Test Scores | 5 | 1 | 2 | 7 | 6 | 8 | 17 | 24 |
| | 4 | 3 | 13 | 13 | 18 | 25 | 23 | 44 |
| | 3 | 6 | 21 | 39 | 60 | 44 | 42 | 61 |
| | 2 | 6 | 14 | 34 | 51 | 30 | 20 | 34 |
| | 1 | — | 9 | 4 | 13 | 7 | 7 | 12 |
| Total Taking Test | | 20 | 59 | 97 | 148 | 114 | 109 | 175 |

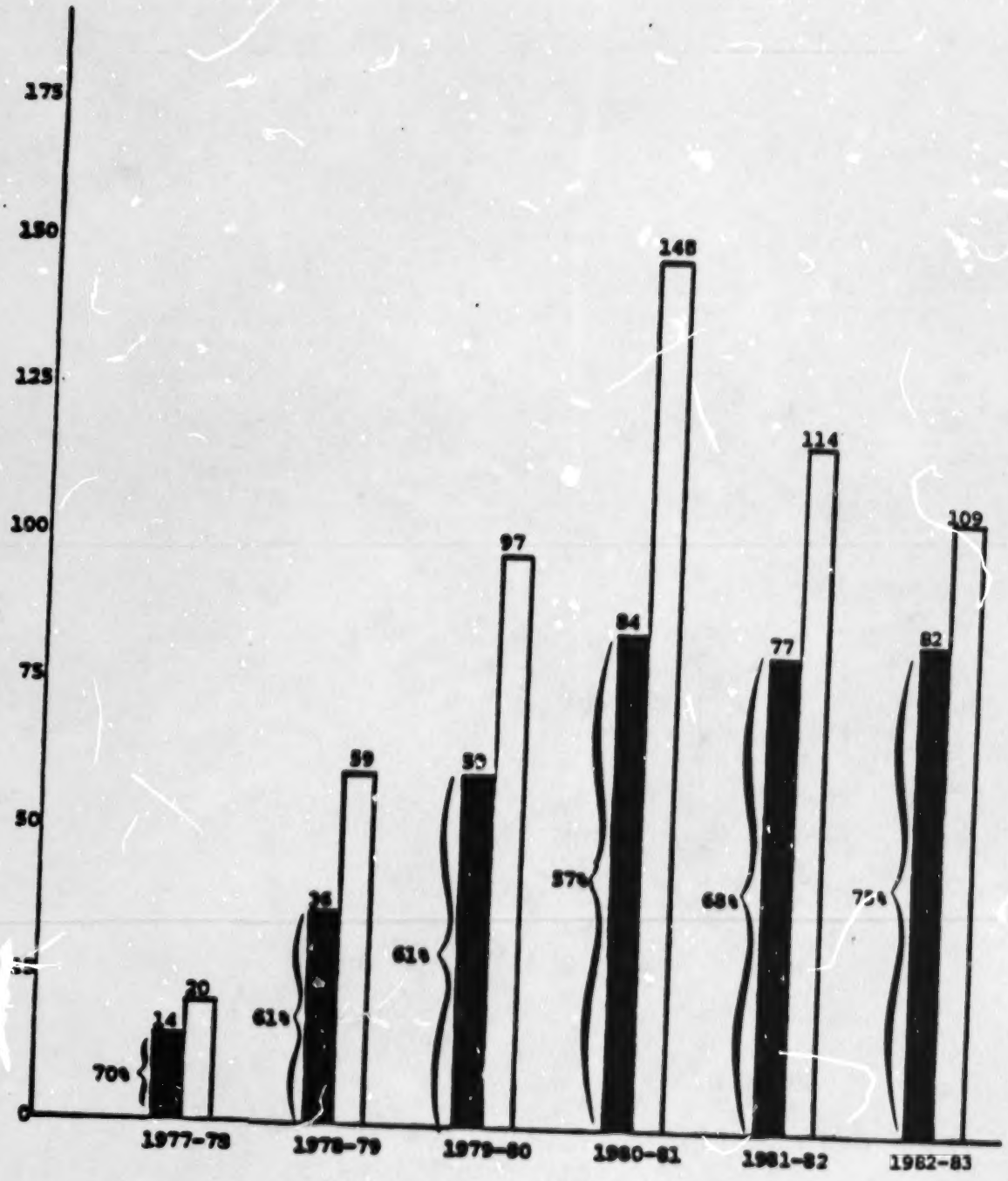


Figure 1

Number of Students* Achieving a "3" or Higher in Relation to Number of Students* Taking AP Test

*Duplicated Count

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decreased from 70% in 1977-78 to a low of 57% in 1980-81 and has since increased to a high of 75% in 1982-83.

Using $300 as a rough estimate of savings per student, the program could have resulted in a savings of approximately $4,000 for all the students the first year, $10,000 for 1978-79, $17,000 for 1979-80, $25,000 for 1980-81, $23,000 for 1981-82, and $25,000 for 1982-83. These figures are certainly rough estimates and depend on whether students are attending public or private institutions. However, with the increasing cost of education, these estimates appear to be reasonable and are probably somewhat conservative.

Table 2 presents the number of students, by school, year, and curriculum area, who were enrolled in Advanced Placement courses. Data are available for the years 1977-78 through 1982-83. The only consistent pattern which emerges is that enrollment in Advanced Placement English courses has increased significantly from 45 in 1977-78 to 166 in 1982-83. Enrollment in other Advanced Placement courses has fluctuated across the six-year period.

## THIS STUDY

As noted in the previous section, the school district already has a great deal of information about A/P students while they are with the Mesa Schools. The district knows the number of students that take various courses, how many of them take the A/P tests, and how well they do on the A/P tests. There was, however, a lack of information concerning those students after they left the school

Table 2

Number of Student Taking A/P Courses
1978-79 - 1982-83

Dobson

| | 81-82 | 82-83 |
|---|---|---|
| English | | 17 |
| Calculus | | 15 |
| American History | 12 | 10 |

Mesa High

| | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 |
|---|---|---|---|---|---|
| English | 13 | 18 | 66 | 72 | 87 |
| American History | | 13 | 22 | 24 | 10 |
| Chemistry | 7 | 11 | 9 | | 8 |

Mountain View

| | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 |
|---|---|---|---|---|---|---|
| English | 45 | 30 | 46 | 40 | 35 | 34 |
| Calculus | | 17 | 15 | | | |
| American History | 7 | 11 | 13 | 7 | 17 | 16 |
| Physics | | 32 | 28 | 26 | 29 | 13 |
| Biology | | | | 17 | | 8 |

Westwood

| | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 |
|---|---|---|---|---|---|
| English | 10 | 17 | 16 | 35 | 28 |
| Calculus | 35 | 13 | 17 | 28 | 14 |
| American History | | | 50 | 58 | 11 |
| Chemistry | | | 9 | 5 | 7 |
| Physics | | | 10 | 14 | 20 |

District Totals

| | 77-78 | 78-79 | 79-80 | 80-81 | 81-82 | 82-83 |
|---|---|---|---|---|---|---|
| English | 45 | 53 | 81 | 122 | 142 | 166 |
| Calculus | | 52 | 28 | 17 | 28 | 29 |
| American History | 7 | 11 | 26 | 79 | 99 | 47 |
| Chemistry | | 7 | 11 | 18 | 5 | 15 |
| Physics | | 32 | 28 | 36 | 43 | 33 |
| Biology | | | | 17 | | 8 |

district. It was felt that information should be solicited from former A/P students in an attempt to evaluate the A/P classes they took and to determine whether or not the A/P classes that they took provided them an opportunity to receive advanced placement in the college they chose to attend. In addition, information on whether or not the classes enabled them to perform better in their college classes was desired.

# METHODOLOGY

## SURVEY DEVELOPMENT

Survey questions were solicited from the director of the district gifted programs and members of the Superintendency. In addition, the 1968 survey, "What College Students Say About Advanced Placement," by Patricia Lund Casserly published by the College Board was examined. Questions were adapted from that survey. A survey was then pilot tested with a small group of current and former A/P students. Their suggested revisions were incorporated into the final instrument (Appendix A).

The survey was broken into five sections. The first section solicited demographic information from the graduates. The second section asked the students which A/P classes they took, the number of semesters they took A/P classes, and the years in which the classes were taken. The third section asked the students to indicate whether or not some additional A/P courses should be offered at the school they attended. Nine subjects, computers, calculus, chemistry, physics, biology, computer science, art, music, and foreign language, were listed for their consideration. These courses were not offered at all the schools during the time under

study. The fourth section solicited information on the A/P classes that the students took and how those classes affected their college course work, what credit they received for those classes in college, and how the A/P class helped them. The final section asked a number of questions concerning A/P classes and where students received help and information concerning A/P classes. There was a comment section at the end. The order of the survey is not followed in presenting the results. Demographics are presented first, followed by the A/P classes taken. Then the section presenting students' reactions to the classes follows, and the students' input on what A/P courses should be offered is the last section presented.

## SAMPLING

After the survey was completed, a list of all students who had enrolled in an A/P class from 1978-79 through 1982-83, was elicited from district records. All of the students who had been enrolled in an A/P class for those years were sent a survey to complete and asked to return it to the district Research and Evaluation office by January 10, 1984. Lists of those students that may have taken A/P tests but did not enroll in A/P classes were not readily available. It was felt, however, that these students were small in number and their omission from the study would not affect the results. Also, lists of the original 45 students that took the A/P class in 1977-78 were not available.

# RESULTS

## DEMOGRAPHIC CHARACTERISTICS OF FORMER A/P STUDENTS RESPONDING TO THE SURVEY

One hundred and eighty-two of 579 surveys distributed were returned to the Research and Evaluation Department. This represented a return rate of 31%. Of that number, 20% were from Mesa High School, 30% from Westwood, 46% from Mountain View, and 3% from Dobson. These figures are fairly close to the percentages of the total A/P enrollment from each school: Mesa High, 29%; Westwood, 32%; Mountain View, 35%; and Dobson, 4%. Students from five graduating classes, 1979-1983, were represented with 6% of the responses from 1979, 13% from 1980, 22% from 1981, 28% from 1982, and 31% from 1983. These figures also follow those of the percentages of the total A/P enrollment: 1978-79, 13%; 1979-80, 14%; 1980-81, 23%; 1981-82, 26%; and 1982-83, 24%. Of the 182 surveys returned, 35 did not indicate whether the respondent was male or female. Of the remaining 147 surveys, 41% were male and 59% were female. Students were also asked to indicate what their current status was in regard to college and university. Fifty-four percent of the students indicated they were attending an in-state college or university, 23% are attending an out-of-state college or

university, 13% an in-state community college, 7% are out of school, and 3% indicated they were doing something else with their time (Table 3).

Table 3

Demographic Characteristics of
Former A/P Students Responding to Survey

| | Number | % |
|---|---|---|
| School | | |
| Mesa High | 37 | 20.3 |
| Westwood | 55 | 30.2 |
| Mountain View | 84 | 46.2 |
| Dobson | 6 | 3.3 |
| Total | 182 | 100.0 |
| Year of Graduation | | |
| 1979 | 11 | 6.1 |
| 1980 | 23 | 12.7 |
| 1981 | 40 | 22.1 |
| 1982 | 51 | 28.2 |
| 1983 | 56 | 30.9 |
| Total | 181 | 100.0 |
| Sex | | |
| Male | 61 | 41.5 |
| Female | 86 | 58.5 |
| Total | 147 | 100.0 |
| Presently Attending: | | |
| In-state college/univ. | 98 | 54.4 |
| Out-of-state college/univ. | 42 | 23.3 |
| In-state community college | 23 | 12.8 |
| Out of school | 12 | 6.7 |
| Other | 5 | 2.8 |
| Total | 180 | 100.0 |

## A/P CLASSES TAKEN

Questions 3-8 on the survey asked the students to identify which A/P classes they took during their high school career. They were then to think about each class individually and respond true or false to eight statements. The eight statements were: "I took the A/P test only;" "I took the A/P test and the A/P course;" "I took the A/P course only;" "I received college credit for this class;" "I did not have to take the same class in college;" "The A/P class helped me do better in the college class (if you took class again in college);" "The A/P class helped me do well in related college classes;" and finally, "I was prepared for the Advanced Placement test."

Seven different categories of classes were taken by students responding to the survey. They were junior English, senior English, biology, chemistry, physics, and one category with both American history and government and the other category with trigonometry, calculus, and finite math. It should be noted that not all respondents marked true or false to every one of the eight statements. Therefore, on tables 4-12 the "Total" for all of the classes varied from 223 to 306. In addition, the total column represents a duplicated count. Each respondent answered a series of questions for each course he/she took. Therefore, the 182 respondents represented up to 306 responses on some questions.

Only one student who responded to the survey indicated that they took the A/P test only and that was a student who took senior English (Table 4.)

Table 4

I took the A/P test only.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 0 | 0 | 13 | 100 | 13 |
| 2 Sr. English | 1 | 1 | 103 | 99 | 104 |
| 3 Math | 0 | 0 | 59 | 100 | 59 |
| 4 Biology | 0 | 0 | 8 | 100 | 8 |
| 5 Chemistry | 0 | 0 | 19 | 100 | 19 |
| 6 Physics | 0 | 0 | 47 | 100 | 47 |
| 7 History | 0 | 0 | 40 | 100 | 40 |
| Total | 1 | 1 | 289 | 99 | 290 |

*Estimate of the number of students taking a given class.

Among the responses to the seven different classes, 46% took the A/P test and the A/P class (Table 5). This figure from the sample is also close to the overall population figure of 43% of respondents who answered false to the statement, "I took the A/P course only." There was a significant difference in the distribution of yes/no responses among the classes. The responses ranged from a low of 11% or only two students who took the A/P class and A/P test in chemistry to a high of 73% of the students in senior English who took both the A/P class and the A/P test. In addition, 57% of the respondents indicated that they took the A/P course but never took the A/P test (Table 6). Overall, there were 306 classes taken by the 182 students who responded to the survey.

Table 5

I took the A/P test and the A/P course.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 2 | 13 | 13 | 87 | 15 |
| 2 Sr. English | 81 | 73 | 30 | 27 | 111 |
| 3 Math | 18 | 30 | 43 | 70 | 61 |
| 4 Biology | 4 | 33 | 8 | 67 | 12 |
| 5 Chemistry | 2 | 11 | 16 | 89 | 18 |
| 6 Physics | 15 | 31 | 33 | 69 | 48 |
| 7 History | 20 | 49 | 21 | 51 | 41 |
| Total | 142 | 46 | 164 | 54 | 306 |

*Significant difference among classes at .05 level.

Table 6

I took the A/P course only.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 13 | 93 | 1 | 7 | 14 |
| 2 Sr. English | 32 | 30 | 73 | 70 | 105 |
| 3 Math | 45 | 74 | 16 | 26 | 61 |
| 4 Biology | 7 | 78 | 2 | 22 | 9 |
| 5 Chemistry | 18 | 90 | 2 | 10 | 20 |
| 6 Physics | 33 | 69 | 15 | 31 | 48 |
| 7 History | 21 | 55 | 17 | 45 | 38 |
| Total | 169 | 57 | 126 | 43 | 295 |

*Significant difference among classes at .05 level.

The balance of the questions asked each respondent about the individual classes they took, whether or not the class helped them to receive credit in college, or helped them do well in related classes when they were in college. Overall, the responses indicated that students received credit for 28% of the A/P classes they took. There was a significant difference among the classes with the results shown on Table 7. Forty-three percent of the students who took senior English received college credit for it while only one student received college credit for chemistry.

Table 7

I received college credit for this class.*

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 1 | 7 | 14 | 93 | 15 |
| 2 Sr. English | 48 | 43 | 64 | 57 | 112 |
| 3 Math | 13 | 22 | 46 | 78 | 59 |
| 4 Biology | 4 | 36 | 7 | 64 | 11 |
| 5 Chemistry | 1 | 5 | 18 | 95 | 19 |
| 6 Physics | 8 | 17 | 40 | 83 | 48 |
| 7 History | 10 | 25 | 30 | 75 | 40 |
| Total | 85 | 28 | 219 | 72 | 304 |

*Significant difference among classes at .05 level.

A different picture emerges though when one considers only those students who were eligible to receive college credit for A/P coursework (students who took the A/P test). Table 8 shows that 60% of the students who were eligible in each course received college credit. The percentage of students receiving credit ranged from a

low of 50% of those respondents who took junior English, chemistry and history to a high of 100% of those who took biology. The other courses, physics (53%), senior English (59%), and math (72%) fell between the two extremes. These percentages would again be increased if only the number of students that scored 3 or more on the A/P tests were included. It was felt, however, that the better measure is the percent of those students taking the tests.

Table 8

| Class | Total* | No. of Students Who Took A/P Class and A/P Test** | No. of Students Who Received College Credit for Class | % of Eligible Students Who Received College Credit |
|---|---|---|---|---|
| Jr. English | 15 | 2 | 1 | 50 |
| Sr. English | 112 | 81 | 48 | 59 |
| Math | 61 | 18 | 13 | 72 |
| Biology | 12 | 4 | 4 | 100 |
| Chemistry | 19 | 2 | 1 | 50 |
| Physics | 48 | 15 | 8 | 53 |
| History | 41 | 20 | 10 | 50 |
| Total | 308 | 142 | 85 | 60 |

*Estimate of the total number of classes taken.

**Students who were eligible to receive college credit for A/P courses.

When asked to indicate whether or not they had to take the same class in college, the respondents, again looking at all students, indicated that they had to take 42% of the classes over again. There was a significant difference between the yes/no responses of

the students ranging from a high of 56% of the history students who had to take the class again in college to a low of only 26% of the students who had to take the class again in college for physics (Table 9).

Table 9

I did not have to take the same class again in college.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 6 | 43 | 8 | 57 | 14 |
| 2 Sr. English | 55 | 50 | 55 | 50 | 110 |
| 3 Math | 18 | 30 | 43 | 70 | 61 |
| 4 Biology | 6 | 50 | 6 | 50 | 12 |
| 5 Chemistry | 8 | 42 | 11 | 58 | 19 |
| 6 Physics | 12 | 26 | 35 | 74 | 47 |
| 7 History | 22 | 56 | 17 | 44 | 39 |
| Total | 127 | 42 | 175 | 58 | 302 |

*Significant difference among classes at .05 level.

When students were asked if the A/P class helped them do better in college, 74% of the respondents indicated that the classes helped them do better. There was a significant difference between the yes/no responses with responses ranging from a high of 91% of the students who felt that junior English helped them do better in college to a low of 54% of the students in history who felt that the course helped them do better in college (Table 10).

When asked if the A/P class helped them do well in college related classes, 88% of the respondents indicated that the classes helped them do well in college. There was not a significant difference between the different classes (Table 11).

Table 10

The A/P class helped me do better in the college class (if you took class again in college).

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 10 | 91 | 1 | 90 | 11 |
| 2 Sr. English | 57 | 70 | 25 | 30 | 82 |
| 3 Math | 46 | 90 | 5 | 10 | 51 |
| 4 Biology | 3 | 50 | 3 | 50 | 6 |
| 5 Chemistry | 9 | 75 | 3 | 25 | 12 |
| 6 Physics | 25 | 71 | 10 | 29 | 35 |
| 7 History | 14 | 54 | 12 | 46 | 26 |
| Total | 164 | 74 | 59 | 26 | 223 |

*Significant difference among classes at .05 level.

Table 11

The A/P class helped me do well in related college classes.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 13 | 93 | 1 | 07 | 14 |
| 2 Sr. English | 96 | 90 | 11 | 10 | 107 |
| 3 Math | 54 | 92 | 5 | 08 | 59 |
| 4 Biology | 9 | 90 | 1 | 10 | 10 |
| 5 Chemistry | 18 | 95 | 1 | 05 | 19 |
| 6 Physics | 27 | 82 | 6 | 18 | 33 |
| 7 History | 19 | 70 | 8 | 30 | 27 |
| Total | 236 | 88 | 33 | 12 | 269 |

*Significant difference among classes at .05 level.

One of the purposes of A/P classes is to prepare students for the Advanced Placement test. Fifty-seven percent of the responses indicated that they received satisfactory preparation for the Advanced Placement test. There was a significant difference in the perceptions of students in the different classes with 75% of the responses indicating that junior and senior English prepared students for the Advanced Placement test compared to 38% of the respondents who felt prepared by the physics class (Table 12).

Table 12

I was prepared for the Advanced Placement test.

| Class | Yes | % | No* | % | Total |
|---|---|---|---|---|---|
| 1 Jr. English | 9 | 75 | 3 | 25 | 12 |
| 2 Sr. English | 76 | 75 | 26 | 25 | 102 |
| 3 Math | 19 | 44 | 24 | 56 | 43 |
| 4 Biology | 5 | 63 | 3 | 38 | 8 |
| 5 Chemistry | 5 | 38 | 8 | 62 | 13 |
| 6 Physics | 15 | 38 | 24 | 62 | 39 |
| 7 History | 13 | 42 | 18 | 58 | 31 |
| Total | 142 | 57 | 106 | 43 | 248 |

*Significant difference among classes at .05 level.

## STUDENTS' GENERAL REACTIONS TO CLASSES

Questions 18 to 28 asked the former A/P students to indicate whether they strongly agreed, agreed, had no opinion, disagreed or strongly disagreed with a series of statements concerning Mesa

Schools A/P classes in general. The student responses to those questions are shown in Table 13. Former A/P students felt most strongly about three questions with over 90% of the students strongly agreeing and agreeing with the statements, "A/P classes were a valuable experience;" "A/P classes were more interesting than other classes;" and "A/P classes were more challenging than other classes." The two statements receiving the largest percentage of disagree/strongly-disagree responses were item 24, "I was overworked in A/P classes," 78% of the students strongly disagreed or disagreed with the statement and item 26, "A/P classes prevented me from participating in other school activities," with 80% of the students strongly disagreeing or disagreeing with this item.

The respondents were relatively split between agree and disagree on "Mesa Schools A/P class should be more difficult," 36% versus 38%, and "A/P classes enabled me to skip some college work," 46% versus 38%. They did agree, however, over 70% agreeing, that they should have taken more A/P classes and that more A/P classes should have been offered. They did not feel, 78%, that the extra work in A/P classes was a deterrent to participating in extra curricular activities, and they strongly agreed, 88%, that the A/P classes helped in their preparation for college work.

## WHO HELPED THE A/P STUDENTS

Questions 29-41 of the survey asked students to respond to a number of questions or statements about their A/P experience. The opinions expressed by the students are shown in Table 14.

Table 13

| | Strongly Agree/ Agree | No Opinion | Disagree/ Strongly Disagree |
|---|---|---|---|
| 18. Mesa School's A/P classes should be more difficult. | 36.2 | 25.4 | 38.4 |
| 19. The A/P classes I took helped prepare me for college work. | 88.2 | 6.7 | 5.1 |
| 20. A/P classes enabled me to skip some college work. | 46.4 | 15.1 | 38.5 |
| 21. A/P classes were a valuable experience. | 93.9 | 5.0 | 1.1 |
| 22. A/P classes were more interesting than other classes. | 90.7 | 6.6 | 2.7 |
| 23. A/P classes were more challenging than other classes. | 97.2 | 1.1 | 1.7 |
| 24. I was overworked in A/P classes. | 6.7 | 15.1 | 78.2 |
| 25. The extra work in A/P classes did not prevent me from participating in extra curricular activities. | 77.8 | 13.3 | 8.9 |
| 26. A/P classes prevented me from participating in other school activities. | 5.5 | 13.8 | 80.7 |
| 27. I should have taken more A/P classes. | 71.3 | 15.5 | 13.3 |
| 28. More A/P classes should have been offered. | 72.0 | 24.2 | 3.8 |

Table 14

| | | |
|---|---|---|
| 29. | The person who influenced me the most in my decision to take an A/P course was: | % |
| | a teacher. | 30 |
| | a counselor. | 10 |
| | a parent. | 14 |
| | a friend. | 23 |
| | an A/P teacher. | 23 |
| 30. | What was the major reason you enrolled in a high school A/P course. (Circle only one.) | |
| | I was bored with regular classes. | 9 |
| | It would provide advanced placement in college. | 10 |
| | It would provide a challenge. | 20 |
| | I was advised that it was the best thing to do. | 5 |
| | I felt these classes would provide the best preparation for college. | 57 |
| 31. | Was your choice of college influenced by whether or not they accepted A/P credit? | |
| | Yes | 5 |
| | No | 95 |
| 32. | My A/P experiences were: | |
| | outstanding. | 40 |
| | very good. | 45 |
| | average. | 14 |
| | not very good. | 1 |
| | poor. | 0 |

Table 14 (cont.)

| | | |
|---|---|---|
| 33. | My A/P teachers were: | % |
| | excellent. | 60 |
| | very good. | 29 |
| | average. | 7 |
| | not very good. | 3 |
| | poor. | 1 |
| 34. | How many college semester units were you granted credit for because of A/P classes in high school? | |
| | 0 | 60 |
| | 1-3 | 14 |
| | 4-6 | 12 |
| | 7-10 | 11 |
| | More than 10 | 3 |
| 35. | Were you admitted to a college with immediate standing as a sophomore? | |
| | Yes (only one student) | .6 |
| | No | 99 |
| 36. | Did you reject a college(s) because they did not give credit for your A/P classes? | |
| | Yes | 2 |
| | No | 98 |
| 37. | A/P classes when compared to college classes were: | |
| | much more difficult. | 2 |
| | more difficult. | 21 |
| | about the same. | 42 |
| | less difficult. | 27 |
| | much less difficult. | 8 |

Table 14 (cont.)

| | | |
|---|---|---|
| 38. | Counselors: | % |
| | were very helpful and provided information on A/P courses and advanced college placement. | 10 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 20 |
| | provided some information on A/P courses and advanced college placement. | 34 |
| | provided almost no information on A/P courses and advanced college placement. | 23 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 13 |
| 39. | Regular classroom teachers: | |
| | were very helpful and provided information on A/P courses and advanced college placement. | 7 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 30 |
| | provided some information on A/P courses and advanced college placement. | 37 |
| | provided almost no information on A/P courses and advanced college placement. | 21 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 5 |
| 40. | A/P teachers: | |
| | were very helpful and provided information on A/P courses and advanced college placement. | 49 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 36 |
| | provided some information on A/P courses and advanced college placement. | 12 |
| | provided almost no information on A/P courses and advanced college placement. | 2 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 1 |

Table 14 (cont.)

| 41. The method of teaching used most often in my A/P classes was: | % |
|---|---|
| lecture. | 74 |
| seminar. | 13 |
| small group activities. | 6 |
| independent research. | 4 |
| other. | 3 |

Thirty percent of the respondents indicated that a teacher influenced them the most in the decision to take an A/P course with an additional 23% indicating it was a friend, 23% indicating it was an A/P teacher, 15% indicating it was a parent, and 10% indicating it was a counselor.

Students took A/P classes in high school primarily because they felt they would provide the best preparation for college (57%). Twenty percent of the students said it was a challenge while 10% indicated it would provide advanced placement in college. In addition, 95% of the students indicated that their choice of college was not influenced by whether or not they accepted A/P credit. This was further evidenced by student responses to the question, "How many college semester units were you granted credit for because of A/P classes in high school?" Sixty percent of the students were not granted credit for the A/P classes they took during high school. Fourteen percent received credit for 1-3 hours, 11% received credit for 4-6 hours, 11% indicated they received credit for 7-10 hours,

and 3% indicated they received more than 10 hours worth of college credit. Only one student of those that responded was accepted into a college with standing as a sophomore (Table 15).

Students were very pleased with their A/P experiences. Over 85% indicated the experience was either very good or outstanding with about the same percentage, 89%, of students indicating that their A/P teachers were either very good or excellent. Students found their A/P classes about the same or more difficult than their college classes. Seventy-seven percent indicated their A/P classes when compared to college classes were about the same or less difficult or much less difficult (Table 16).

The respondents felt most positive toward A/P teachers when asked to indicate how helpful A/P teachers, classroom teachers, and counselors were in providing information about A/P classes and advanced college placement. Over 85% of the students indicated that A/P teachers were very helpful or helpful and provided some information on A/P classes and advanced college credit. In comparison students indicated only 36% of regular classroom teachers were very helpful or helpful, and 30% of counselors were very helpful or helpful (Table 17).

The final question that was asked concerned the method of teaching used most often in A/P classes. Seventy-four percent of the students indicated it was lecture, 13% indicated that it was the seminar, with 6% using small group activities, 4% independent research, and 3% some other form of instruction (Table 18.)

Table 15

| | | |
|---|---|---|
| 29. | The person who influenced me the most in my decision to take an A/P course was: | % |
| | a teacher. | 30 |
| | a counselor. | 10 |
| | a parent. | 14 |
| | a friend. | 23 |
| | an A/P teacher. | 23 |
| 30. | What was the major reason you enrolled in a high school A/P course. (Circle only one.) | |
| | I was bored with regular classes. | 9 |
| | It would provide advanced placement in college. | 10 |
| | It would provide a challenge. | 19 |
| | I was advised that it was the best thing to do. | 5 |
| | I felt these classes would provide the best preparation for college. | 57 |
| 31. | Was your choice of college influenced by whether or not they accepted A/P credit? | |
| | Yes | 5 |
| | No | 95 |
| 34. | How many college semester units were you granted credit for because of A/P classes in high school? | |
| | 0 | 60 |
| | 1-3 | 14 |
| | 4-6 | 12 |
| | 7-10 | 11 |
| | More than 10 | 3 |

Table 15 (cont.)

| 35. | Were you admitted to college with immediate standing as a sophomore? | % |
|---|---|---|
| | Yes (only one student) | .6 |
| | No | 99 |

Table 16

| 32. | My A/P experiences were: | % |
|---|---|---|
| | outstanding. | 40 |
| | very good. | 45 |
| | average. | 14 |
| | not very good. | 1 |
| | poor. | 0 |
| 33. | My A/P teachers were: | |
| | excellent. | 60 |
| | very good. | 29 |
| | average. | 7 |
| | not very good. | 3 |
| | poor. | 1 |
| 37. | A/P classes when compared to college classes were: | |
| | much more difficult. | 2 |
| | more difficult. | 21 |
| | about the same. | 42 |
| | less difficult. | 27 |
| | much less difficult. | 8 |

Table 17

| | | % |
|---|---|---|
| 38. | Counselors: | |
| | were very helpful and provided information on A/P courses and advanced college placement. | 10 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 20 |
| | provided some information on A/P courses and advanced college placement. | 34 |
| | provided almost no information on A/P courses and advanced college placement. | 23 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 13 |
| 39. | Regular classroom teachers: | |
| | were very helpful and provided information on A/P courses and advanced college placement. | 7 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 30 |
| | provided some information on A/P courses and advanced college placement. | 37 |
| | provided almost no information on A/P courses and advanced college placement. | 21 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 5 |
| 40. | A/P teachers: | |
| | were very helpful and provided information on A/P courses and advanced college placement. | 49 |
| | were helpful and provided some information on A/P courses and advanced college placement. | 36 |
| | provided some information on A/P courses and advanced college placement. | 12 |
| | provided almost no information on A/P courses and advanced college placement. | 2 |
| | were of no help at all when discussing A/P courses and advanced college placement. | 1 |

Table 18

| 41. The method of teaching used most often in my A/P classes was: | % |
|---|---|
| lecture. | 74 |
| seminar. | 13 |
| small group activities. | 6 |
| independent research. | 4 |
| other. | 3 |

## HIGH SCHOOL A/P COURSE OFFERINGS

The former A/P students were asked to indicate whether or not their former high school should offer an A/P course in computers, calculus, chemistry, physics, biology, computer science, art, music, and foreign language. They were asked to indicate whether they strongly agreed, agreed, had no opinion, disagreed, or strongly disagreed with offering each of those courses. Not all students answered all of the questions. Table 19 shows a list of courses and the percentage of students that answered strongly agree/agree, no opinion, and strongly disagree/disagree. It also includes a column that indicates the number of students that did not answer the question. As Table 4 shows, over 80% that responded to the item indicated that they felt A/P courses should be offered in computers, calculus, chemistry, physics, and computer science, 79% of the students indicated that a course should be offered in biology, and

Table 19

Percent of Those Responding as Indicated to:

My school should offer an A/P course in:

| | % Who Strongly Agree/Agree | % Who had No Opinion | % Who Disagree/ Strongly Disagree | Number of No Responses |
|---|---|---|---|---|
| Computers | 87 | 12 | 1 | 33 |
| Calculus | 81 | 16 | 3 | 108 |
| Chemistry | 88 | 10 | 2 | 102 |
| Physics | 85 | 12 | 3 | 114 |
| Biology | 79 | 18 | 3 | 89 |
| Computer Science | 86 | 12 | 2 | 44 |
| Art | 48 | 35 | 17 | 49 |
| Music | 53 | 27 | 20 | 49 |
| Foreign Language | 71 | 23 | 5 | 49 |

71% indicated that a course should be offered in foreign language. Only 53% of the students indicated a course should be offered in music with 48% indicating one should be offered in art. It should be noted that about half of the former students did not respond to the questions concerning calculus, chemistry, physics, and biology. This might have influenced the high percentage of responses indicating additional classes should be offered in those courses.

## COMMENTS

One hundred and sixty-nine of the respondents to the A/P survey offered comments. The vast majority of the comments were very positive. An example of some of the comments were:

> "Thanks to my high school's wonderful A/P program, I am excelling in my major, English. In addition, I will be taking a junior course load next semester although I am only a sophomore."
>
> "A/P classes were a thrill and challenge. I am in college now, and it is not nearly as interesting as my A/P classes. I vote to escalate A/P into a huge program. It was terrific."
>
> "I personally feel that juniors should be better informed about A/P classes so that they can plan their senior year more appropriately. I learned about A/P just in a passing moment. How grateful I was for the teacher who encouraged me to take it."
>
> "I challenge you to make every effort to accommodate the exceptional student and provide them opportunities for enrichment. Believe me, you won't be disappointed."

The two areas in which the largest number of students commented were those concerning teachers and the advertising of A/P classes. Forty-four students made comments that recognized great teachers and what a valuable experience A/P was. Thirty-three students commented that A/P classes should receive more publicity. They encouraged all students to take the A/P classes. Seventeen students felt that more sections of A/P classes should be offered and that courses should be offered in music and writing skills. A few students felt that more information should be provided on college credit that could be received for A/P classes and that practice tests should be made available to students before the A/P tests.

There were very few negative comments made by students. Those that were made concerned the fact that not enough preparation was provided for college level classes, that more homework was needed, and that there should be better screening for A/P teachers and possibly more training for those teachers that are in the program. In addition, some students expressed a concern about A/P classes being dropped because few students registered for the classes. Those students felt that even if few signed up for a class, it should be offered as it would provide a wonderful opportunity for those few students.

## SUMMARY

One hundred and eighty-two of 579 former A/P students responded to a survey administered in January of 1984. The survey was an attempt to determine the attitudes of those former students toward their experience in the Mesa Schools A/P Program, to determine if they had received credit for their A/P classes in college, and to elicit suggestions for improving the A/P Program. Of the 182 respondents, 41% were male and 59% were female. The highest percentage of respondents (59%) were from the two most recent graduating classes of 1982 and 1983. The fewest respondents were from the 1979 class (6% of the total).

Over 80% of the respondents thought computers, calculus, chemistry, physics, and computer science classes should be added to the A/P Program at their school. In addition, a significant

percentage of students thought that biology (79%), foreign language (71%), music (5?%), and art (48%) should be added to the program at their school. Students were asked to react to the quality of the A/P classes offered during their high school career. Over 80% of the students felt that the A/P classes helped prepare them for college work, were a valuable experience, were more interesting than other classes, and were more challenging than other classes. The students were split as to whether or not the classes should be more difficult. Seventy-eight percent of them strongly disagreed or disagreed with the statement that they were overworked in A/P classes. The former students also felt that the extra work of the A/P classes did not prevent them from participating in extra-curricular activities. A large percentage of students (72%) felt more A/P classes should have been offered, and 71% of the students felt they should have taken more A/P classes.

The largest percentage of students were most influenced in their decision about whether or not to take an A/P class by a teacher (30%), with 23% of them being influenced most by a friend, and an additional 23% by an A/P teacher. They were enrolled primarily in A/P classes because they felt it would provide them with the best preparation for college (57%) with another large percentage of students (19%) feeling it would provide a challenge to them. When they considered which college to enter, the decision was not influenced by whether or not the college would accept A/P credit. In fact, most of them (60%) did not receive any college credit at all for the A/P classes they took in high school. However, 23% of them did receive between four and ten hours of

semester credit for the A/P classes that they did take. Only one student who responded to the survey was admitted to college with immediate standing as a sophomore.

A/P teachers were apparently the most helpful group to students interested in taking A/P classes and receiving advanced college placement. Eighty-five percent of the respondents rated the A/P teachers as very helpful or helpful in providing some information on A/P courses in advanced college placement, with only 37% rating regular classroom teachers helpful or very helpful, and only 30% of them rating counselors helpful or very helpful.

Students were asked a number of questions about the individual classes that they took. There were seven different categories of classes incuding junior English, senior English, math, biology, chemistry, physics, and history. Only one student of the 182 respondents took the A/P test without taking the A/P class and that was one student who took the senior English A/P test. The 182 respondents took 306 different A/P classes. Of the 306 different classes, the students took the A/P test and the A/P course in 142 cases (46%) compared to 164 cases in which they took only the A/P course without taking the test. On the question that asked students whether or not they received college credit for the class, 182 respondents indicated they took 304 classes; they received college credit for 85 (28%) of those classes and did not receive credit for 219. When asked whether or not they took the same class again in college, the students indicated there were 302 classes that they took, with 127 (42%) indicating they did not have to take the same class again in college, and 175 indicating that they did have to

take the same class again. Note: There were differences in the total number of classes taken in the three previous questions because not all students answered all questions about all courses.

Seventy-four percent of the students indicated that the A/P classes helped them do better in college class work in the same class, and 88% of them indicated that the A/P classes helped them do better in related college classes. Fifty-seven percent of the students felt that they were prepared for the Advanced Placement test by the class with 43% indicating they were not prepared for the test. Overall, the students felt positive about their A/P experience with 85% of the students rating the experience as outstanding and very good. Eighty-nine percent of the students rated their teachers as excellent to very good. Finally, 23% of the students indicated that the A/P classes they took in high school were more difficult or much more difficult than the classes they took in college with 77% indicating it was the same or more difficult.

The major areas of concern noted by the students were the publicizing of the A/P classes, the A/P class offerings, and the information concerning the use of A/P classes for college credit.

## CONCLUSIONS AND RECOMMENDATIONS

The vast majority of most students felt very positive about their A/P experience. They thought their teachers were of excellent to very good quality, that their classes helped them do better in

college course work in both related and unrelated classes. When asked about specific classes, most students felt that the classes provided the challenge they needed and the information necessary to do well in college. There was some concern about whether or not they were prepared to take the A/P tests. Forty-three percent of the students indicated they were not prepared for the test. A large percentage of the students that responded to the survey indicated that more courses should be offered. The courses that had the largest number of students indicating that the classes should be in place at their schools were computer science and computer classes. Consideration should be given to adding those courses.

A significant concern of the students appeared to be the information that was available about A/P classes. Students were concerned that not enough information was available from any one source and that the information that was out wasn't as accurate as it could possibly be. Consideration should be given to providing information to all teachers about the availability of A/P classes, making sure that all students are informed wherever possible of the type of classes offered. Students who made comments expressed concern that some A/P classes are being dropped for lack of students in the class. Those students felt that even if few students are available, they should have the opportunity to take the class as it provided such a wonderful opportunity for them.

# APPENDIX A

Survey of Former Advanced Placement Students
for the Mesa Public Schools

Mesa High School attended_____ Sex: M F

Year Graduated_____

Directions:

Please take a few minutes of your time to answer the following questions. Mark your answer for each question by circling the number next to the response that BEST reflects your feelings. When you have completed the survey, return it to the Mesa Public School's Research and Evaluation Department in the envelope provided. Please return the survey no later than January 10, 1984. Thank you for your time.

1. Please list the Advanced Placement classes that you took in a Mesa High School and indicate the years that you were in the program.

| A/P Classes/Test | Number of Semesters in Class | Year in which Class/Test was taken (Dates) |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

2. I am presently attending:
   1) In-state college/university
   2) Out-of-state college/university
   3) In-state community college
   4) In-state trade, technical or business school
   5) Out of school
   6) Other

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Indicate which of the following statements are true and which are false by circling the appropriate word. Complete one set of questions for each A/P class/test you took. Indicate which A/P class/test on the line _____ provided.

| | I took the A/P test only. | I took the A/P test and the A/P course. | I took the A/P course only. | I received college credit for this class. | I did not have to take the same class in college. | The A/P class helped me do better in the college class (if you took class again in college. | The A/P class helped me do well in related college classes. | I was prepared for the Advanced Placement Test. |
|---|---|---|---|---|---|---|---|---|
| 3. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |
| 4. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |
| 5. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |
| 6. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |
| 7. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |
| 8. A/P Class/Test _____ | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 | True False 1 2 |

Answer the following questions only if your school did not offer the A/P course mentioned in the question. Please read each statement carefully. Mark the number that corresponds to the way you feel about each statement.

My high school should offer an A/P course in:

| | Strongly Agree | Agree | No Opinion | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| 9. computers. | 1 | 2 | 3 | 4 | 5 |
| 10. calculus. | 1 | 2 | 3 | 4 | 5 |
| 11. chemistry. | 1 | 2 | 3 | 4 | 5 |
| 12. physics. | 1 | 2 | 3 | 4 | 5 |
| 13. biology. | 1 | 2 | 3 | 4 | 5 |
| 14. computer science. | 1 | 2 | 3 | 4 | 5 |
| 15. art. | 1 | 2 | 3 | 4 | 5 |
| 16. music. | 1 | 2 | 3 | 4 | 5 |
| 17. foreign language. | 1 | 2 | 3 | 4 | 5 |

Please read each statement carefully. Mark the number that corresponds to the way you feel about each statement.

| | | | | | |
|---|---|---|---|---|---|
| 18. Mesa School's A/P classes should be more difficult. | 1 | 2 | 3 | 4 | 5 |
| 19. The A/P classes I took helped prepare me for college work. | 1 | 2 | 3 | 4 | 5 |
| 20. A/P clases enabled me to skip some college work. | 1 | 2 | 3 | 4 | 5 |
| 21. A/P classes were a valuable experience. | 1 | 2 | 3 | 4 | 5 |
| 22. A/P classes were more interesting than other classes. | 1 | 2 | 3 | 4 | 5 |
| 23. A/P classes were more challenging than other classes. | 1 | 2 | 3 | 4 | 5 |
| 24. I was overworked in A/P classes. | 1 | 2 | 3 | 4 | 5 |
| 25. The extra work in A/P classes did not prevent me from participating in extra curricular activities. | 1 | 2 | 3 | 4 | 5 |
| 26. A/P classes prevented me from participating in other school activites. | 1 | 2 | 3 | 4 | 5 |
| 27. I should have taken more A/P classes. | 1 | 2 | 3 | 4 | 5 |
| 28. More A/P classes should have been offered. | 1 | 2 | 3 | 4 | 5 |



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Please answer the following questions carefully. Mark the one answer that best reflects your experience in the Mesa A/P program.

29. The person who influenced me the most in my decision to take an A/P course was:
    1) a teacher
    2) a counselor
    3) a parent
    4) a friend
    5) an A/P teacher

30. What was the major reason you enrolled in a high school A/P course? (Circle only one.)

    1) I was bored with regular classes.
    2) It would provide advanced placement in college.
    3) It would provide a challenge.
    4) I was advised that it was the best thing to do.
    5) I felt these classes would provide the best preparation for college.

31. Was your choice of college influenced by whether or not they accepted A/P credit?

    1) yes
    2) no

32. My A/P experiences were:

    1) outstanding
    2) very good
    3) average
    4) not very good
    5) poor

33. My A/P teachers were:

    1) excellent
    2) very good
    3) average
    4) not very good
    5) poor

34. How many college semester units were you granted credit for because of A/P classes in high school?

    1) 0
    2) 1-3
    3) 4-6
    4) 7-10
    5) More than 10

35. Were you admitted to college with immediate standing as a sophomore?

    1) yes
    2) no

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36. Did you reject a college(s) because they did not give credit for your A/P classes.

1) yes
2) no

37 A/P classes when compared to college classes were:

1) much more difficult.
2) more difficult.
3) about the same.
4) less difficult.
5) much less difficult.

38. Counselors:

1) were very helpful and provided information on A/P courses and advanced college placement.
2) were helpful and provided some information on A/P courses and advanced college placement.
3) provided some information on A/P courses or advanced college placement.
4) provided almost no information on A/P courses and advanced college placement.
5) were of no help at all when discussing A/P courses or advanced college placement.

39. Regular classroom teachers:

1) were very helpful and provided information on A/P courses and advanced college placement.
2) were helpful and provided some information on A/P courses and advanced college placement.
3) provided some information on A/P courses or advanced college placement.
4) provided almost no information on A/P courses and advanced college placement.
5) were of no help at all when discussing A/P courses or advanced college placement.

40. A/P teachers:

1) were very helpful and provided information on A/P courses and advanced college placement.
2) were helpful and provided some information on A/P courses and advanced college placement.
3) provided some information on A/P courses or advanced college placement.
4) provided almost no information on A/P courses and advanced college placement.
5) were of no help at all when discussing A/P courses or advanced college placement.

41. The method of teaching used most often in my A/P classes was:

1) lecture
2) seminar
3) small group activities
4) independent research
5) other

42. Comments or suggestions for the Mesa Public School's A/P program.